**◈ FCL-100S2 TR**

**(Base Configuration)**



**Description**

Syscom Korea, a leader in the market of pixel to pixel cabling solution, created Fiber Optics based Camera Link cable. Syscom Korea cabling solution will be a perfect choice for overcoming the problems of facility access, capital cost, distance, EMI, ESD and bandwidth. Camera Link is a high-speed camera/frame grabber interface designed for high performance vision applications. Standard Camera Links deliver signals to 10 meters or less, occurring inflexible situations in many applications which requires longer distance image transmission between the camera and the frame grabber. Syscom Korea’s Optical Camera Link Cable can send signals up to 20km without electrical or magnetic noises that plague performance of high speed Camera Link. Syscom Korea’s Optical Camera Link solution consists of plug and play modules with FCL-100S2T connecting to camera and FCL-100S2R connecting to the frame grabber( or PC) side. The FCL-100S2T receives, converts and sends out video data to fiber from the camera while FCL-100S2R receives the optical signals, converts them back into video data and sends to two frame grabbers.

**Key Features**

* All of Camera-Link Interface Compliance ( Area and Line Scan)
* Support Base Configuration (CC1 ~ 4, RS232, 6 Ports, LVAL, DVAL, FVAL)
* Support Pixel clock from 20 - 85MHz
* Auto detect and Generate Pixel clock
* Zero loss and transparent transport
* Locking DC power connector
* Attaches to the compact SDR26 connectors
* Status Monitoring LEDs ( PWR, ACT, Error )
* Intelligent cable disconnect detecting ( Camera cable, Fiber cable )
* Re-synchronization buttons
* LC duplex fiber link (2-core fiber)
* Allows remote operation up to 20km

**Applications**

* Machine Vision Applications
* Product inspection - PCB, LCD, Wafer
* Bar code reading and sorting
* Medical Imaging
* High precision security surveillance
* Vehicle license plate reading/recording
* Port/Harbor cargo container management
* Railroad measurement/inspection
* Intelligent Traffic Systems (ITS)
* Border Control
* Cameras placed in harsh environment

- Nuclear plant, Chemical plant, Factory

* Long haul image transmissions
* Bridge inspection
* Military & Defense Applications
* Astronomy
* Computer microscopy
* Multi-media

**Typical Set Up Diagram**



**Technical Specifications**

|  |  |  |
| --- | --- | --- |
| **Camera link Interface** | | |
| **Product** | FCL-200L T/R | |
| **Pixel Clock Range** | 20 ~ 85 [MHz] | |
| **Supported**  **Camera Configuration** | Base | |
| **Sync. Signals** | LVAL, FVAL, DVAL | |
| **Camera Control** | CC1 ~ CC4 |
| **Serial Communication** | SerTFG, SerTC | |
| **Connector Type** | Mini Camera Link ( SDR ) | |

|  |  |
| --- | --- |
| **Optical Interface** | |
| **Operating Wavelength** | 1310 [nm] |
| **Min Optical TX Output Power** | -2.5 [dBm] |
| **Transmission Distance** | Max 2000 [m] |
| **Connector Type** | LC Duplex |
| **Fiber Type** | 9/125 [um] SMF | |

|  |  |  |
| --- | --- | --- |
| **Environments** | | |
| **Operating Temperature** | 0 ~ 50 [ºC] | |
| **Input Voltage** | DC 12 ~ 24 [V] | |
| **Typical Supply**  **Current @ 12V DC** | CM-base 250 [mA] | |
| **Connector Type** | Molex 53259-0329 Male | |
| **Weight (Approximate)** | 300 Gram each module |

**Dimensions**

